

ABSTRACT OF THE DISCLOSURE

MAC values formed with respect to each file belonging to a directory 122A and ICVs (D-ICVc) formed on the basis of the MAC values of all files belonging to the directory 122A are stored into a sequence page 121A. Sequence pages 121A, 121B, ... formed respectively with respect to all of directories 122A, 122B, ... on a disk and the ICVs formed on the basis of the D-ICVs stored in all of the sequence pages 121A, 121B, ... are stored into a sequence block 114. Since the MAC values are closed and managed every directory by the sequence pages 121A, 121B, ..., a data alteration check can be executed every directory. An alteration check of data recorded on a recording medium can be efficiently performed.